

VOLUME 4 NO. 2
DEC 2007

ISSN 1675-7017

SOCIAL AND MANAGEMENT RESEARCH JOURNAL



INSTITUTE OF RESEARCH, DEVELOPMENT AND COMMERCIALISATION



SOCIAL AND MANAGEMENT RESEARCH JOURNAL

Chief Editor

Prof Dr Rashidah Abdul Rahman,
Universiti Teknologi MARA, Malaysia

Managing Editor

Assoc Prof Dr Loo Ern Chen
Universiti Teknologi MARA, Malaysia

Editorial Advisory and Review Board

Prof Dr Normah Omar, Universiti Teknologi MARA, Malaysia
Prof Dr Sardar M.N. Islam, Victoria University, Melbourne, Australia
Prof Dr Faridah Hassan, Universiti Teknologi MARA, Malaysia
Assistant Prof Alexander N. Kostyuk, Ukrainian Academy of Banking of National
Bank of Ukraine, Sumy, Ukraine
Assoc Prof Dr Razidah Ismail, Universiti Teknologi MARA, Malaysia
Assoc Prof Dr Nor'azam Mastuki, Universiti Teknologi MARA, Malaysia
Assoc Prof Dr Roshayani Arshad, Universiti Teknologi MARA, Malaysia
Assoc Prof Dr Nor Aziah Alias, Universiti Teknologi MARA, Malaysia
Dr Sabarinah Sheikh Ahmad, Universiti Teknologi MARA, Malaysia.
Assoc. Prof Dr Maznah Wan Omar, Universiti Teknologi MARA, Malaysia.
Dr Megawati Omar, Universiti Teknologi MARA, Malaysia.
Dr Rashid Ameer, Universiti Teknologi MARA, Malaysia
Dr Azizah Abdullah, Universiti Teknologi MARA, Malaysia
Dr Azmi Abdul Hamid, Universiti Teknologi MARA, Malaysia
Dr Kalsom Salleh, Universiti Teknologi MARA, Malaysia

Copyright © 2007 by Institute of Research, Development and Commercialization (IRDC), Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or any means, electronics, mechanical, photocopying, recording and otherwise, without prior permission, in writing, from the publisher.

Social and Management Research Journal is jointly published by Institute of Research, Development and Commercialization (IRDC) and University Publication Centre (UPENA), Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.

The views and opinion expressed therein are those of the individual authors and the publication of these statements in the Social and Management Research Journal do not imply endorsement by the publisher or the editorial staff. Copyright is vested in Universiti Teknologi MARA. Written permission is required to reproduce any part of this publication.

SOCIAL AND MANAGEMENT RESEARCH JOURNAL

Vol. 4 No. 2

December 2007

ISSN 1675-7017

1. Entrepreneurial Orientation and Effectiveness of Small and Medium Agro-based Enterprises (SMAEs) in Malaysia – Mediating Effect of Knowledge and Network Strategies 1
Amran Awang
Khairul Anwar Subari
Zainal Ariffin Ahmad
Abdul Rashid Said Asghar
2. Exploring Entrepreneurial Knowledge and Usage of Islamic Micro Financing: A Case Study on Islamic Guarantee Schemes of Credit Guarantee Corporation (CGC) 23
Ismail Ahmad
Husniyati Ali
Jaafar Pyeman
Muhamad Rahimi Osman
3. The Application of E-Commerce Among Small Medium Enterprises: A Case Study in Kelantan 45
Norudin Mansor
Che Ismail Long
Ahmad Ismail Mohd. Annuar
4. Using Web-based Resources in Learning: Factors That Affect Degree Students' Readiness 71
Peridah Bahari
Salina Hamed
5. How Far Ethics Education Positively Influences Ethical Decision Making of the Young Lawyers in Kedah? 83
Anida Mahmood
Haswira Nor Mohamad Hashim
Kamarul Ariffin Mansor

6.	Reading Behaviour and the Influence of Reading on the English Language Proficiency at UiTM Sabah <i>Jocelyn Lee Yee Vun</i> <i>Dorothy Chin</i> <i>Xavier Thayalan</i>	93
7.	An Evaluation of Business-to-Business Electronic Commerce Marketplaces (e-marketplaces) in Malaysia <i>Nor Azzyati Hashim</i> <i>Mardziah Hashim</i> <i>Rogayah Abdul Majid</i>	101
8.	A Survey of Life-long Reading Habits Among UiTM Undergraduates <i>Soo Kum Yoke</i> <i>Evelyn Sharmannie</i> <i>Ahmad Azman</i>	123
9.	Environmental Management Elements and Corporate Environmental Performance of SMEs in Malaysia <i>Hanim Norza Baba</i>	133
10.	Measuring and Managing Franchisee Satisfaction: A Study of Academic Franchising <i>Firdaus Abdullah</i> <i>Mohd Rashidee Alwi</i> <i>Voon Boo Ho</i> <i>Nagarajah Lee</i>	167

The Application of E-Commerce Among Small Medium Enterprises: A Case Study in Kelantan

Norudin Mansor

Che Ismail Long

Ahmad Ismail Mohd. Annuar

Faculty of Business Management,

Universiti Teknologi MARA (UiTM), Malaysia

Email: norudinm@tganu.uitm.edu.my

ABSTRACT

The research project was conducted to investigate the understanding of E-commerce Application among the SMEs in the state of Kelantan. Focusing on the population of registered members of Dewan Perniagaan Melayu Malaysia, Kelantan, a total of 302 respondents were selected to participate in our study. Moving in line with the general assumption of world business community it is agreed that e-commerce application is highly relevant for the survival and meeting the challenges of borderless economy. At the same time, the process of acquiring knowledge and understanding the environment, coping with changes, and speeding up the business decision, able to further enhance the competitive advantage of the SMEs. Using the established model, our investigation focused on 5 identifiable variables to demonstrate its usefulness towards motivating SMEs to adopt e-commerce. Our analysis indicated that all the selected variables were significant towards enhancing the application of e-commerce and thus maintaining competitive advantage in the industry.

Keywords: *E-commerce application, SMEs, logistic, marketing, procurement, security, government*

Introduction

Moving into the twenty first century, more and more people are becoming comfortable with the use of information technology (IT) in their daily lives. IT

encompasses almost all aspects of human activities either in business operations, daily communications, purchasing, promotions, entertainment and many others. IT applications not only provide the users with many benefits such as saving time, money and energy but also keep them abreast with the economic and technological changes of the world. The business communities should also take the advantages of IT applications due to its ability to display their advance innovativeness which is very essential in maintaining the competitive edge over their competitors. The tremendous growth of internet technologies has provided an opportunity especially for small and medium sized enterprises (SMEs) to create a world wide virtual community in which they can compete with large enterprises (Kiang and Chi, 2000). As suggested by Ainin Sulaiman (2000), these new developments are expanding beyond the utilization of internet as a communication medium to a new tool of doing business through electronic commerce (e-commerce).

The emergence of e-commerce is creating fundamental changes on the way business is conducted (Mohd Amirul Akhbar Mohd Zulkifli, 2001). The customers can shop around comprehensively at their leisure anywhere, at any time and always enjoy the same level of services at virtually no costs (Abu Bakar A Hamid and Rohaizat Baharun, 2004). Apparently, with the paperless transaction, buyers are no longer required to fill in order forms or visit a business premise to place their order. Everything can be done electronically at the buyers' convenience. According to Edim (2000), even though SMEs might have a difficulty to develop a sophisticated web due to lack of expertise and funds, they still need e-commerce to prosper and go for an on-going survival.

Problem Statement

Malaysia is considered as one of the active nations in developing its information and communication technology (ICT). The importance of ICT has been recognized not only to the development of the nation and its society but also among the business communities. Our informal observations and interviews on e-commerce applications in Kelantan have discovered that, most of the SMEs were lightly attached to the use of internet or e-commerce in their business operations. Our discussion with several authorities further revealed that majorities of Bumiputera entrepreneurs in Kelantan do not use the latest technologies such as computers in their businesses. They also lack of knowledge about IT and are hardly been exposed to the development of the technology.

For SMEs to adopt e-commerce applications, various issues need to be addressed. Firstly, the cost and benefits associated with IT? How reliable is the application in their day-to-day business operation? Among those who found to be newly exposed to IT, does the application received support services such as training, budget, and expert opinions? How serious is the issue of cyber

crime occurring? Thus, this study is purposely designed to answer these research questions concerning the identifiable factors that drive the application of e-commerce among SMEs establishments. In addition, the study also aims to recognize the barriers towards incorporating e-commerce in their business.

Objective of the Study

The study attempted to:

- investigate the strength of the relationship between applications of e-commerce with marketing, logistics, procurement, security and government policy.
- explore the demographic profiles of the SMEs in IT applications.
- explore to what extent each of the selected variables in explaining the applications of e-commerce.
- provide suggestions based on the findings for strengthening the culture of e-commerce applications among the SMEs.

Scope and Limitation

The researchers focus on the SMEs established in the state of Kelantan that continuously demonstrate yearly growth in term of numbers and assets. However, in respect of culture and awareness of IT, applications among them are still reported to be low. Due to the difficulties in getting the population list, this research decided to focus the investigation based on the list generated by Malay Chamber of Commerce known as Dewan Perniagaan Melayu (DPMM) Kelantan in 2005.

The study, assumed 5 (five) predictors for the application of e-commerce among SMEs. The predictors that had been identified include marketing, logistic, procurement, security, and government/ agent policy. Other variables such as psychological barriers, technical issues, financial issues, training, exposures, and few more others to some extent found to have their influenced will not be considered in this study as their inclusion may interfere with the focus of the study. In addition, with the time and budget allocated it is impossible to use too many variables under one research project.

Literature Review

E-COMMERCE: Numerous people and organizations interpret Electronic Commerce or E-commerce in typical ways. The term “e-commerce” emerged

when businesses started to realize the role of Internet as a powerful medium for conducting business especially in the service sector (Zillur Rahman and Bhattachryya, 2002) as it is able to improve customer-supplier relationship. E-commerce is the flow of process which is purchasing, marketing, sales and customer support that is mainly associated with a commercial relationship or transaction over the internet (Nissen, 1997; Schneider, 2002). Businesstown (2003) viewed e-commerce as online businesses that are paperless exchange of business information. Among the most forms that commonly use are by using electronic data interchange (EDI), e-mail, electronic bulletin boards, fax transmissions and electronic fund transfer. Laudon and Traver (2001) describe e-commerce as all about time cycle, speed, and globalization, enhanced productivity, reaching new customers and sharing knowledge across institution, through digitally enabled transaction across boundaries in return for products and services.

E-commerce evolved in various means of relationships within the business circle. It can be in the form of Business to Customer (B2C), Business to Business (B2B), Business in Business (BIB) and lastly Customer to Customer (C2C). Generally, B2B which is between organizations formed the bulk of the e-commerce activities. Although e-commerce implies information between businesses, the technology is equally applicable between business and consumers and indeed between consumers themselves (Heizer and Render, 2001). As such, the significant role of internet as the main tool in e-commerce is becoming more relevant as it also acts as a distribution channel on top of being involved with the task of the traditional intermediaries (Vrana, 2006).

Statistic revealed by Multimedia Development Corporation (MDEC) indicates the penetration rate of e-commerce in Malaysia which is substantially increased yearly, provides a huge potential for SMEs to adopt e-commerce in their business. This rate is expected to constantly grow up at a substantial rate from year to year.

In electronic markets, the principal participants – transaction handlers, buyers, brokers, and sellers are at different locations and even not knowing each other (Abu Bakar and Rohaizat, 2004). Some people think that the implementation of e-commerce is found to be both costly and cumbersome. However, in reality it drives down cost factors and is able to improve performance which offers opportunities to achieve a competitive advantage through product differentiation with particular reference to branding and pricing (Reynolds, 2000). Other than that, it provides better avenues for enhancing cooperation between trading parties (Pawar and Driva, 2000) beside shortening the time in marketing the products or services.

According to Farhoomand and Lovelock (2001), there are five broad themes which can be discerned in the emergence of the e-commerce market space which are building a sustainable environment for a new business ecosystem. Amongst them are, e-commerce is altering the relative importance of time,

removing geographical boundaries, challenging traditional intermediation, openness in the underlying technical business operation, philosophical expansion of various activities and having a catalytic effect on direct or indirect reaction of the business environment.

SMES AND E-COMMERCE: In order to survive in today's challenging environment, it is imperative that SMEs be competitive and resilient. Towards this end, SMEs need to continuously strengthen their capacity and capability to produce high quality products and services at competitive prices (BNM, 2005). Previous studies conducted among Malaysian Bumiputera SMEs indicated that they were weak in product, promotion, and distribution innovation which therefore reflecting the poor performance of the SMEs (Norudin Mansor, 2004).

Previous literatures used to define SMEs from different perspectives such as defining based on the number of employees, paid-up capital, sectors of operations, and also the intensity of investment incurred. As such there is no one acceptable standard about defining SMEs (Hashim and Abdullah, 1999; Moha Asri Abdullah, 1997). However, there are a few measurements that they may take into consideration such as its categories, sales turnover and number of employees (BNM, 2005). In Malaysia, the most widely adopted definition usually those as been defined by SMIDEC (Small and Medium Development Corporation) and BNM (Bank Negara Malaysia) whereby SMEs can be grouped into three categories: Micro, Small, or Medium. These groupings are decided based on either the numbers of people a business employs or on the total sales revenue generated by a business in a year. In summary, detailed definitions of SMEs by size are:

Table 1: Characteristics of Small and Medium Industry

Sector	Category	Definition	
		Sales Turnover (RM)	Employees
Manufacturing	Micro	Less than 250,000	< 5
	Small	250,000 – less than 10mil	5 – 50
	Medium	10,000,000 – 25,mil	51 – 150
Services	Micro	Less than 200,000	< 5
	Small	200,000 – less than 1mil	5 – 19
	Medium	1mil – 5mil	20 – 50

Sources: SMIDEC (2005)

SMEs are major employers in the labor market. According to BNM (2005), they provided greater flexibility in employment terms whereby 76.5% of total SME workers were hired on a full-time basis. Further literatures discovered that majority of the SMEs in Malaysia prefer to be involved in retailing, agriculture,

restaurants, canteen and cafeteria, handicrafts, tailoring, small-scale manufacturing, beauty saloon, direct selling, and door-to-door business (Norudin Mansor, 2005). This type of businesses are largely less-capital intensive and requires personal communication with the customers. As such, the application of e-commerce therefore is found to be less desirable.

The advent of E-commerce has required SMEs to radically re-think their priorities when making decisions as to whether to adopt and use the technology in their organizations (MacGregor, 2003). With the application of the world-wide-web (www) and the internet, technology generally is likely to have a profound impact on business around the world. The application of E-commerce in Malaysia even though is encouraging, but it is still at its infant stage. Reviewing on the finding by Abu Bakar and Rohaizat (2002), most of the Malaysian SMEs are still left behind in terms of using internet in their business transaction. One way to promote the application is by speeding the usage among the local MSC status companies which act as the centerpiece of the national IT strategy. Despite of the promotion most of the MSC status companies found to be using the internet for conservative task such as for communication and information gathering purposes (Noor Hazarina Hashim and Abu Bakar Hamid, 2004). Previous studies on the SMEs in Perak indicated the low usage of the application in most business sectors. Similar trend prevailed even for those who had been in operation with the novice status or already established (Norudin Mansor and Noor Rohaya Abdul Manap, 2006).

In order to prosper, SMEs need e-commerce to reach new markets that cannot be reached traditionally (Edim, 2000). E-commerce fundamentally brought about changes in communications, business methods, market structure and approach as well as day-to-day operations of organizations (MacGregor, 2003). The development of competitive and resilient SMEs, form an integral component of the initiatives for Malaysia to achieve sustainable economic growth and developed country status by 2020 (BNM, 2005). Thus the decision whether to apply e-commerce are at time taken into consideration on the nature of business, the business objectives, as well as who are their target markets.

MARKETING: Traditional marketing preached the idea of gathering intelligence capability as well as problem solving role so as to get closer to customers and provide a total package of services to them (Lazer et.al 1989) and thus allowing for uniformly high quality of presentations in different market (Terpstra, 1987). The role of e-commerce in providing avenue to shift out of the home and onto consumers' digital communication devices by matching messages to consumer preferences and demographics, marketers will be able to better target the right recipient with the right message at the right time. Other than that, marketing functions are now performed under a hypermedia-computer-mediated-environment where interactivity and connectivity are replacing the traditional mode of negotiation and communication (Fatimah, 1999). Alverson and Marchel

(1999) agreed that with the advent of Web marketing and E-Commerce, personalized marketing may seem lost forever. Retailers are no longer known their customers name, faces and ancestry, as well as their buying habits. Even though the mode of shopping has changed, there are a few things that consumers still expect, such as a competitive pricing, quality products and services, and most importantly trust to meet and surpass customers' expectations.

A successful e-commerce business must be globally aware, system-oriented and customer sensitive. Their marketing strategies have to be innovative, and attentive to customer feedback with the efforts to reach huge market (Kotler, 2000). Companies can use the direct access to consumers to collect information that will help them better develop products to meet the consumers need through customizations or create new niche products (Rohaizat Baharun and Abu Bakar A Hamid, 2005). In general most firms used e-commerce primarily to provide information about company, its product and services, and for both internal and external communication (Ahmad Mahmood and Nor Azah Jahari, 2005). In addition online consumers can easily gain access to graphics, sound, and even movies, thus enabling real time transaction interactivity at a selected convenience time (Hoffman and Novak, 1996). This is a good opportunities to SMEs to market their product internationally since the information can be widely spread all over the world.

As indicated by O' Brien (2005),as most of the business activities involved with buying and selling, marketing of products and services over the computer network, e-commerce therefore is changing the shape of competition, the speed of action, and the streamlining of interactions and payments from customers to companies and from companies to suppliers. Another interesting feature concerning marketing in e-commerce is the attractiveness of its flexibility as compared to the traditional approach. This flexibility not only adds to new items and update info based on the direct feedback received from customers (Hagel and Lansing, 1994), but the powerful 24 hour accessibility resulted with increase business hours across the world.

LOGISTICS AND PROCUREMENT: Logistics is very much related to the movement of goods or services within the respective parties to the transaction. Kotler (2000) defines logistics as "Planning, implementing, and controlling the physical flows of materials and final goods from points of origin to points of use to meet customer's need at a profit". When retailers or SMEs apply e-commerce, they indirectly remove the need for intermediary distribution channels and extend the distribution coverage across the globe. As e-commerce become accepted and practically used it is changing the trend in distribution systems because the e-retailers are at the same time a retailer and a distribution center (Rodrigue, 2007). With connectivity of the Web, shipping charges can be precisely determined in real time, and a tracking number can be assigned to the shipment at the time order is placed.

There are some advantages that SMEs can gain as they adopt in commerce from the point of logistics which is cost reduction through improved process efficiency, improved reach, the unbundling of business systems and price reductions (Farhoomand and Lovelock, 2000). Despite the advantages, still the application of e-commerce is found to be low throughout the nation.

E-procurement formed an integral part of any e-commerce operation (Madu and Madu, 2003), and most supply chain management involves the procurement of materials which are to be transformed or delivered. It is always been a major cost concerned in any business operations in addressing the issue. A well designed operation flow which adds-up to internet technology will no doubt provide a systematic and efficient cost control. Procurement in e-commerce can be explained as any designed to facilitate the acquisition of goods by a commercial or a government organization over the Internet (Croom and Johnson, 2003) that involved spending on materials components, facilities, subcontract capacity, IT equipment and supplies, consumables, stationeries and other form of services that constitute a significant amount of money transaction. As it is the electronic tendering and procurement of goods and services, with the application they are able to access a larger number of suppliers worldwide, thereby enjoying better prices, better quality and better delivery (Farhoomand, and Lovelock, 1999).

Because procurement is an expensive business activity, once a business switches to an online-based procurement system, they can begin seeing benefits immediately. The administrative costs for each purchase is significantly reduced due to less paperwork running by the system and not by employees themselves. Furthermore, when employees realize how convenient and cost-effective the new procurement strategy is, they will be less likely to make purchases through non-contracted suppliers, thus saving businesses even more money (Azham Hussain et al., 2005).

SECURITY: Security is one of the most addressed issues in implementing trust mechanisms because the main concern about e-commerce is whether it is safe to conduct on-line transactions as to protect businesses from fatal blow to business (Computerworld, 2006). As business move towards adapting on-line trading, issues of on-line transaction security become more important (Farhoomand and Lovelock, 2001). Erwin Dan (2000) added that ICT can lead to other security threats, crime, loss of sensitive business information, harm to corporate or brand name reputation, and loss of privacy because anybody can retrieve information freely to pursue any agenda.

The major threats to business are greater information losses, theft of data or trade secrets, infection with a computer virus, and manipulation of their internal systems or software applications. Based on these core issues, usually business leader perceive the security risk of web-based electronic commerce to be quite high, and many are reluctant to engage in it. Based on survey on

Malaysian companies' interest in e-business, 70 % believed that security was the most important barrier to e-commerce development (Abdul Mukti, 2000). Another security issue that needed attention is the interrupting part of the value chain, as the web enables consumers or anybody to have direct access to content providers. This accessibility allows the possibility of picking and choosing content that affect the decision on the transaction (Evans and Wurster, 1997; Smith, 2002). Thus serious attention needs to be worked out in order to build confidence of the agencies in using internet as an effective marketing tools that needed a strategic deployment of security, technology and cost effective concerns (Chen and Yen, 2004; Wan, 2002).

GOVERNMENT POLICY: The government plays a pivotal role in the process of development of e-commerce to enhance the economic wealth of the nation. With SMEs have a crucial role to play in the industrialization process, the government's principal role is to ensure the provision of an adequate infrastructure, enabling industry to function efficiently with minimum interference (Wilson & Drysdale, 2001), while assuring enough support equitably addressed. In Malaysia, SMEs still continue to depend heavily on government incentives (Edim, 2000), hoping that adequate infrastructure is provided for them to start doing business electronically.

Lack of access to finance and information found to be at the top of any list of the problems of SMEs. Financing institutions are usually not able to meet the SMEs need for seed money and investment capital as a result of high transaction costs and perceived risks (Siti Haryati et al. 2004). It is therefore the extra role of the government to facilitate access of SMEs to venture capital funding as well as funds to carry out R&D. The venture capital mode can be extended by the formulation of regulations and tax structures facilitating initial public offerings and the use of electronic networks for matching capital sources to SMEs. Other debt financing mechanisms such as credit guarantee schemes, leasing and factoring have shown considerable potential and need to be developed further. SMEs usually suffer from lack of information on available support and markets signal, including those for local and export markets. With more efficient flows of information, it will lead to more efficient and equitable markets. Thus training in the field of export marketing, procedures and documentation will also be intensified to enable more SMEs to export their products.

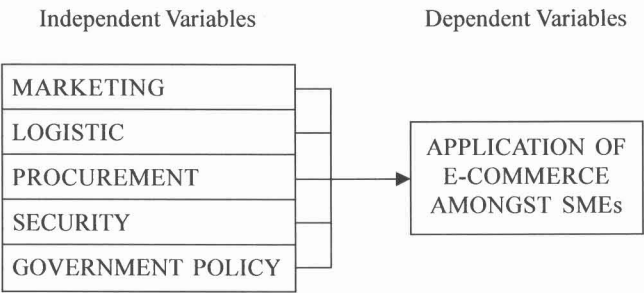
While seriously addressing the issue of online business, the government of Malaysia has embarked on a major push to convince SMEs towards adopting the internet as the new tools and efficient way of operating their businesses. Several initiative and roles were instructed to organization like SMIDEC, the Malaysian Technology Development, and the MDC by offering funding or other forms of assistance for the SMEs to upgrade the computer system. But despite commendable efforts, the SMEs do not seem to be in the forefront of e-business (Karkoviata, 2001).

Research Methodology

Three major considerations entered into the development of our framework. First, we have attempted to include major construct empirically studied or mentioned in the existing literature. Second, we show interrelationships among the constructs. Third, and most importantly, we have attempted to develop a parsimonious framework that captures the richness of the constructs within the context of e-commerce applications among the SMEs. The identifiable constructs were further group into five dimensions including: marketing, logistic, procurement, security, and government policy. The decision on the framework as in Table 2 went through excessive review of the past literatures on research work, concepts, and theories developed either locally or other parts of the world.

Theoretical Framework

Table 2: Theoretical Framework



Hypotheses of the Study

Based on the objective and theoretical framework of the study, several testable non-directional hypotheses were developed to address the research question.

Hypothesis 1: There is a significant relationship between marketing and the application of e-commerce amongst SMEs.

Hypothesis 2: There is a significant relationship between logistics and the application of e-commerce amongst SMEs.

Hypothesis 3: There is a significant relationship between procurement and the application of e-commerce amongst SMEs.

Hypothesis 4: There is a significant relationship between security and the application of e-commerce amongst SMEs.

Hypothesis 5: There is a significant relationship between government policy and the application of e-commerce amongst SMEs.

Hypothesis 6: There is a significant relationship between independent variables as measured by marketing, logistics, procurement, security, government policy and the application of e-commerce.

Hypothesis 7: There is a significant difference between the SMEs education as to the application of e-commerce.

Hypothesis 8: There is a significant difference between the SMEs type of set-up as to the application of e-commerce.

Sampling Procedure

Population and sample size: Based on the list provided by Suruhanjaya Syarikat Malaysia (SSM) there were approximately 120,000 registered businesses in Kelantan for the year 2004. However the population generated by the SSM found to be too large and inaccurate in term of the operational status. Considering the large differences in term of number of business establishments, our survey is unable to generalize the entire SMEs in the state of Kelantan. Thus the population that share the same set of characteristics for the investigation, rely on the list of population generated by DPMM Kelantan. As for the year 2005, the list has approximately 1,700 registered members of the Bumiputera SMEs. Thus, the sample size of 380 for the study, was adopted based on suggestion by Krejcie and Morgan (1970). After several attempts, only 340 responses were collected. Through the data screening process only 302 responses found to be usable for further analysis.

Sampling Technique: Researcher has to consider several limitations before deciding to adopt non probability or probability sampling. The strategy of using probability sampling, even though discovered to be the best alternative, found to be very difficult as the sampling units that are supposed to be selected by chance are not easily accessible. While the non probability sampling that relies in the personal judgment of the researcher rather than chance to select the sample elements were able to provide enough descriptive analysis for the sample surveyed. Because of the limitations mentioned earlier the convenient sampling technique was adopted for the study.

Data Collection and Instrumentation

In collecting the information, the survey procedure through personally administered questionnaire were heavily used and monitored in motivating the

sample to respond. Data were collected cross-sectionally within 6 month period. While efforts were taken to avoid misleading responses, only the owners or managers of the SMEs establishment were allowed to answer the questionnaire.

Structured questionnaire divided into seven (7) sections in the form of close ended questions was designed to collect data from the respondent. Section A contains demographic questions that were designed to get the information about the gender, age, races, education level, working experience, ownership type, business sector, capital investment, and number of employees. The instrumentations were in the form of categorical and multiple choices where most of the data were nominal and ordinal.

Section B measured the independent and dependent variables where each were measured by eleven (11) for application, ten (10) items for marketing variable, while (5) items each for logistic, procurement variable, and security variables. Seven (7) questions were concerning the roles of government and other agencies in promoting e-commerce. All the measurements were in Likert-scale format.

Results and Findings

A pilot test was carried out to assess the reliability and validity of the instruments. Altogether 30 samples from the SMEs were collected. After conducting the reliability analysis, few adjustments were made to the instruments. With the data collected during the first round which is a total of 40 samples, another reliability analysis was conducted. As the result indicated with a reasonable acceptable alpha score which is higher than 0.6, the researchers moved on with the data collection.

Analysis to the reliability of coefficient using Cronbach Alpha for all variables under the investigation followed the suggestion by Sekaran (2003). All variables suggested to be reliable since they were above 0.8 (0.887 for application; 0.809 for logistic, 0.882 for security; 0.815 for agency, 0.925 for marketing, and 0.880 for procurement).

Respondents Profile

The total numbers of respondents were 302 and the demographic profile of the respondents is shown in Table 5. Out of the total sample investigated, 58.6% (majority) of the respondents were sole proprietorship, 30.1% were private limited (Sdn Bhd) company and the remaining 11.3% represented by the partnership group. Analysis on gender indicated that majority of the respondent's were male with the total percentage of 80.8%. A clear contrast of female business owner/manager representation indicated that only 19.2% of the samples selected were from this group. Most of the Bumiputera businesses were managed by

SPM holder, which was 45%. While 22.5% of the businesses were owned or managed by Diploma/STPM holder and another 22.5% were managed by Degree holder and other tertiary qualifications. The minority representations were of those with SRP and below.

Considering the use of internet or the application of e-commerce, our survey displayed that more than half, 56.6%, of the respondents never use e-commerce, while only 20.5% utilized e-commerce with very minimum usage, and 15.2% use it moderately. Only 6.3% of the sample investigated found to be highly involved with the use of e-commerce and 1.3% used them at the maximum capacity. E-mail application formed the highest percentage for type of e-commerce utilization with the percentage of 19.1%, followed by 14.6% using it for banner, 8.3% of the respondent using for website, 7.3% of them used for e-booking/orders, 6.8% using it as e-catalogue, 3.8% used for offer job/contract/tender, followed by e-banking of 3.1% and 2.8% belong to categories of others. While another 34.2% were not using e-commerce as their business tool. Other findings on the demographic profile are depicted in Table 3 below.

Table 3: Demographic Profile of the Respondents

Profile	Frequency	Percent (%)	Profile	Frequency	Percent (%)
Type of Business			Owner/Manager's		
Sole Proprietorship	177	58.6	Education Background		
Partnership	34	11.3	SRP & below	30	9.9
Sdn Bhd	91	30.1	SPM	136	45.0
Gender of			Diploma / STPM	68	22.5
Owner/Manager			Degree & above	68	22.5
Male	244	80.8	Type of e-Commerce		
Female	58	19.2	Utilization:		
Business Sector			Banner	62	14.6
Food	35	11.6	E-mail	81	19.1
Agriculture	7	2.3	Website	35	8.3
Hotel	3	1.0	E-catalogue	29	6.8
Wood base Industry	8	2.6	E-banking	13	3.1
Batik/Handicraft/Textile	22	7.3	Job/Contract/Tender Offer	16	3.8
Building & Construction	36	11.9	E-booking / Orders	31	7.3
Engineering	12	4.0	Others	12	2.8
Others	179	59.3	Not related	145	34.2
Business Capital:			Frequency of e-		
Below RM 250,000	230	76.2	Commerce Utilization		
RM 250,000 – RM 2.5 Mil	72	23.8	Never Use	171	56.6
Number of			Minimum	62	20.5
Course/Training Attended			Moderate	46	15.2
by Worker			High	19	6.3
Never	229	75.8	Maximum	4	1.3
1 – 5 times	64	21.2	Age of Business		
6 times & above	9	3.0	Establishment		
			Below 5 years	136	45.0
			5 years & above	166	55.0

Cross Tabulation

Table 4, provide a general view about the relevancy of e-commerce in their business operation.

Table 4: Cross Tabulation Between Business Sector and Application Factor

Type of Business	Agree	Strongly Agree	Respondent	Percentage
Food	13	0	35	37.1%
Agriculture	3	0	7	42.9%
Hotel	1	0	3	33.3%
Wood base Industry	3	0	8	37.5%
Batik/Handicraft/Textile	7	0	22	31.8%
Building & Constructions	17	0	36	47.2%
Engineering	3	0	12	25.0%
Others	91	7	179	54.7%

Most of the respondents who were in other form of businesses which has not been described in the study, were involved with the application of e-commerce, at the percentage of 54.7%, followed by building & construction sector at 47.2%, and 42.9% from agriculture sector. Much lower application was displayed among the wood base industry; food sector; hotel sector; batik/ handicraft/textile; and engineering sector respectively at 37.5%; 37.1%; 33.3%; 31.8%; and 25%. Thus, e-commerce found not to be on the strong footing and its usefulness towards the growth remained less desirable.

Table 5: Cross Tabulation Between Educational Background and Application

Qualification	Agree	Strongly Agree	Tot. Respondent	%
SRP & below	13	0	30	43.3%
SPM	44	0	136	32.3%
Diploma/STPM	37	4	68	60.2%
Degree & above	44	3	68	69.1%

The cross tabulation between educational background of manager/owner with application of e-commerce as in table 5 indicated that manager/owner who has College education (Degree & above) found to be the majority group that are using e-commerce in their business transaction which was 69.1%, followed by those with Diploma/STPM qualification at 60.2%, and those representing primary school was at 57.1%. The managers/owners who have SRP qualification

and using e-commerce is 39.1% and only 32.3% of SPM holder using e-commerce as their business tools.

Means Analysis

The computed mean values were 3.41 for the Application, 3.45 for Procurement, 3.18 Government Initiative 3.57 Marketing 3.42 Logistic, and 2.76 as for Security. Our finding suggested that the importance of e-commerce application for each selected independent variables is moderate, except for dimension concerning security issues needed to be seriously addressed.

ANOVA between Business Set-up and Application of E-commerce

This testing procedure was conducted for exploring whether type of business set-up that ranges from simple formation such as sole-proprietorship, partnership, and a more structured entity like private limited, applied e-commerce in their business operation.

Table 6: Oneway Anova between Business Set-up and Application of E-commerce ANOVA

mapp	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.287	2	.643	1.800	.167
Within Groups	106.874	299	.357		
Total	108.160	301			

Multiple Comparisons

Dependent Variable: mapp

Tukey HSD

(I) jenis perniagaan	(J) jenis perniagaan	Mean Difference (I-J)			95% Confidence Interval	
			Std. Error	Sig.	Lower Bound	Upper Bound
milik tunggal	perkongsian sdn bhd	-.181	.112	.240	-.44	.08
		-.104	.077	.373	-.29	.08
perkongsian	milik tunggal sdn bhd	.181	.112	.240	-.08	.44
		.078	.120	.795	-.21	.36
sdn bhd	milik tunggal perkongsian	.104	.077	.373	-.08	.29
		-.078	.120	.795	-.36	.21

Our analysis aimed to investigate whether there is a significant different among the type of business registered as to the application of e-commerce. Our analysis indicated that there was no significant difference regardless of the status of the business as to the application of e-commerce. The statistical value in the ANOVA Table 6 indicated the f value of 1.88 and significant value of 0.167 (more then 0.05) which explained that their view as to the application and usefulness of e-commerce is the same. Further comparison between each of them such as between Sole Proprietorship and Private Limited Co. (Sdn. Bhd), Sole Proprietorship and Partnership, Private Limited Co. (Sdn Bhd) and Partnership demonstrated the result of no significant difference based on p-value of 0.373; 0.240; 0.795 which are greater than 0.05 respectively.

ANOVA between Education Backgrounds as to the Application of E-Commerce

This analysis is expected to provide a conclusion as to what extent the variable concerning education level of the SMEs were able to suggest the usefulness of e-commerce application in their business operation. Generally those with higher education are expected to be literally better off and having more interest with the use of current technology like the use of internet as to those receiving lower education.

Table 7: Oneway ANOVA between Education Background as to the Application of E-Commerce Mapp

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.180	3	5.393	17.473	.000
Within Groups	91.980	298	.309		
Total	108.160	301			

Our finding indicated that there is a significant difference in the application of e-commerce based on the level of education. Our Cross-tabulation earlier clearly demonstrated that those who possessed tertiary education were more inclined to apply e-commerce in their business transaction as compared to those with SPM qualification. There is no significant different between these groups. Further analysis of the above indicated that there was a significant different between those with SRP and Diploma, SRP and Bachelor degree, SPM and Diploma, SPM and Degree. Using the Post Hoc the following value of 0.000; 0.001; 0.000; and 0.000 respectively provided the explanation of the status of statistical different among the variables investigated.

Dependent Variable: mapp

(I) pendidikan peng	(J) pendidikan peng	Mean Differ	Std. Error	Sig.	95% Conf. Interval	
					Lower	Upper
SRP & Below	SPM	-.043	.112	.981	-.33	.25
	Diploma/STPM	-.486(*)	.122	.000	-.80	-.17
	Ijazah	-.512(*)	.122	.000	-.83	-.20
SPM	SRP & Below	.043	.112	.981	-.25	.33
	Diploma/STPM	-.443(*)	.083	.000	-.66	-.23
	Ijazah	-.470(*)	.083	.000	-.68	-.26
Diploma/STPM	SRP & Below	.486(*)	.122	.000	.17	.80
	SPM	.443(*)	.083	.000	.23	.66
	Ijazah	-.027	.095	.992	-.27	.22
Ijazah	SRP & Below	.512(*)	.122	.000	.20	.83
	SPM	.470(*)	.083	.000	.26	.68
	Diploma/STPM	.027	.095	.992	-.22	.27

* The mean difference is significant at the .05 level.

Correlation Coefficient (Pearson Correlation)

This analysis was used to explain whether the strength of the relationship between the independent variables towards the dependent variable. The degree of relationship strength followed the suggestion made by De Vaus (2003).

Table 8: Correlation between Logistic, Security, Agent, Marketing, Procurement with the E-Commerce Application

Motivation	Pearson Correlation	Sig. (1 tailed)
Application (Dep) 1.000		
Logistic	.822(**)	.000
Security	.419(**)	.000
Government/agent	.650(**)	.000
Marketing	.797(**)	.000
Procurement	.736 (**)	.000

Table 8 above, displayed a strong correlation between logistic, marketing practices, and procurement as to the application of e-commerce as stated by the Pearson r-value of 0.822, 0.797 and 0.736 respectively. Looking at the correlation between the government/agent role in promoting the application of e-commerce displayed the Pearson r-value of 0.650 which therefore indicated highly moderate relationship, whilst the correlation between security with the application of e-

commerce demonstrated a low moderate relationship. Even though the relationship provide different level of strength but still all the five independent variables investigated were significant at the value of 0.000

Multiple Regressions

Table 9: Coefficient of Determination between Independent and Dependent Variables

Variables	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	B		
(Constant)	.628	.107		5.895	.000
Logistic	.410	.051	.487	7.984	.000
Security	.109	.026	.142	4.244	.000
Agency	.055	.044	.056	1.259	.209
Marketing	.242	.064	.282	3.782	.000
Procurement	.011	.051	.014	.222	.824

From the Table 9 above, it explained that independent variables, which are logistic, security and marketing, are significantly correlated with the application of e-commerce with P value of .000, .000, and .000 respectively ($p < .05$). The analysis result also shows that logistic factors is the major influence factor in the application of e-commerce among the SMEs as indicated by the highest t and beta score ($t = 7.984$ and $\beta = .487$), next was marketing factors with t value of 3.782 and $\beta .222$, then followed by security factors with t value 4.244 and $\beta .142$. The factors concerning the role of agent and the procurement activities does not influence the application of e-commerce because of the t value is 1.259; 0.222 and β value of 0.142; 0.014 respectively.

Table 10: Summary on Multiple Regression Analysis

R	R Square	Adjusted R Square	Sig. F Change
.855 (a)	.732	.727	.000

The table 10 above shows the model summary of multiple-regression. It further verifies that the research model demonstrated a significant relationship between the predictor and the dependent variable. The relationship was significant at P-value of .000. The above summary displayed that 72.7 % of variation could be explained by all independent variables while the remaining

27.3% can not be explained. We therefore conclude that the model found to be fit and able to provide a good explanation of its importance.

Conclusion

Logistic and Procurement with the Application of E-Commerce

The result displayed through regression analysis indicated that the strongest factor contributes to the application of e-commerce among the SMEs is logistics. When SMEs adopted e-commerce in their transaction, they indirectly removed partly the need for intermediary distribution channels while at the same time extending the distribution across the globe. These intermediaries were no longer needed because monopoly on information that they currently hold will no longer be meaningful due to the universal access connectivity (Fatimah Mohd.Arshad, 1999). As mentioned by Rodrigue (2007), logistics in e-commerce is much easier because location choice is more flexible, permitting the use of lower cost that would not have been considered otherwise.

Another interesting finding generated from the study was the relationship of procurement practices and to the application of e-commerce. Our investigation again suggested a strong correlation but the multiple-regression analysis suggested otherwise.

With the accessibility, the online transaction had provided them with easy, simple and efficient framework to satisfy the customers where everything is at the fingertips which greatly reduced time and cost element in the transaction. Procurement relative important become less desirable when other elements involved in the business transaction.

Marketing Practices and Application of E-Commerce

Observing the relationship between marketing practices and the application of e-commerce found to be similarly importance. With all the opportunities available through e-commerce, several benefits in enhancing the best marketing practices sound to be achievable. With the internet access, SMEs agreed that online business transaction had provided them with easy, simple and efficient framework to satisfy the customers.

The need to enhance internet marketing activities is another strategy for moving forward. Through the internet marketing it can increase or enhance company exposure, improve customer service, market new products or services, add value to existing products or services, create one-to-one relationships with customers, and many other possibilities could be added to the list. If SMEs are serious enough to adopt e-commerce, effort should be done to establish an internet marketing budget. No doubt preparing a budget for this purpose can

be a daunting task and entail significant technological cost but effort taken in the long-run may prove worthwhile.

Government and Security with the Application of E-Commerce

From the regression analysis, researcher discovered that government policy is the hindrance factor for SMEs to adopt e-commerce. With more efforts put by the government to create interest of SMEs in e-commerce application, the lesser were their involvement. Efforts were taken by the government urging the local SMEs not to wait long to adopt e-commerce. Otherwise they will lose out to their competitors who have already use online business. As an example, for the year 2000, the government launched a RM20 million e-commerce grant in its effort to encourage local SMEs to adopt e-commerce culture in their business. The effort also intended to help quickly integrating themselves into the mainstream of the ICT. In fact in another attempt SMIDEC was directed to finance e-commerce activities through a provision of RM 10,000 or 70% grant per SMEs, whichever is lower to cover e-commerce related activities.

Attempting to address the issue of security, cyber laws governing computers and information processing were further reviewed. But until today it is reported that the number of legislation passed through were still very few. In fact those that do exist are subject to a variety of interpretation. Only how are lawmakers beginning to recognize the impact of computers, then only its role will be seriously addressed.

Recommendations

The level of application e-commerce among SMEs is still at its infancy. SMEs need to be convinced rather than coerced into getting their business online. Followings are initiatives suggested to enhance e-commerce application:

- √ Seminars and conferences: SMEs were usually not aware about these because of poor promotions and publicity. And even if they were aware, only a limited number of SMEs can join in because of high charges imposed. It is suggested that such programs are to be conducted at open public places which will be much cheaper and easily accessible to them rather than at hotels or exhibition centers.
- √ Mentor-mentee programs: Usually these SMEs have no people to guide them particularly in adopting e-commerce. It is suggested that companies with successful track record of e-commerce applications to assist other businesses in adopting e-commerce. SMIDEC can play the role of a mediator or advisor to this program.

- ✓ Awareness campaign and motivation: In our analysis, awareness of e-commerce among SMEs was moderate. So awareness campaign and motivational activities, technical support, financial assistance, and many others should be conducted by the Ministry of Entrepreneur and Cooperative Development, SMIDEC and other related agencies to stimulate interest among SMEs.
- ✓ Strategic Partnership / Alliance: SMEs should consider their current status of business partnerships or alliances to support the development, and on-going maintenance, of web based applications and e-commerce initiatives, besides enhancing other business activities. This means that they are in better financial position to resort to e-commerce. SMEs need to examine all applications of e-commerce by adding value to their individual business. The programs should be initiated by themselves with the assistance or arrangement by DPMM or YPU.

References

- Abdul Mukti (2000). Barrier to Putting Businesses on the Internet in Malaysia *The Electronic Journal on Information System in Developing Countries*, 2 (6), 1-6.
- Abu Bakar A Hamid and Rohaizat Baharun (2004). Perceptions of E-Commerce Applications in Small and Medium Entrepreneurs (SMEs), Available; <http://www.uum.edu.my>.
- Ahmad Mahmood and Nor Azah Jahaari (2005). The Awareness and Level of Implementation of E-Commerce among SMEs in Malaysia, *Proceedings in International Conference on E-Commerce 2005*, Universiti Utara Malaysia, Kedah, Malaysia.
- Ainin Sulaiman (2000). The Status of E-commerce Applications in Malaysia, (Online) <http://rds.yahoo.com>.
- Alverson and Marchel (1999). Connect with your Customers on the Web, (Online) <http://web.ebscohost.com>.
- Azham Hussain, Fazillah Mohd. Kamal and Ruheila Afzan Musa (2005). The benefits and Limitations of E-Procurement System to Suppliers in Penang and Kedah Area *Proceedings in International Conference on E-Commerce 2005*, Universiti Utara Malaysia, Kedah, Malaysia.

Bank Negara Malaysia (2005). Status and Performance of Small and Medium Enterprises, (Online), <http://www.bnm.gov.my>.

BNM (2007). Conclusion of the Sixth National SME Development Council Meeting: Major Initiatives to Support the Development of SMEs, Available, <http://www.bnm.gov.my>.

Business Town (2003). The definition of e-commerce, (Online), <http://www.bisnisstoen.com>.

Chen, K. and Yen, D. (2004). Improving the Quality of Online Presence Through Interactivity. *Information and Management*, 42 (1), 217-226.

Computerworld (2006). SMEs: Next Engine of Growth, (Online), <http://computerworld.com.my>.

Croom, S. and Johnson, R. (2003). E-Service: Enhancing Unternal Customer Service Through E-procurement, *International Journal of Service Industry management*, 14 (5), 539-555.

De Vaus, D.A. (2002). *Surveys in Social Research*, 5th ed. Allen & Unwin, Australia.

Dijk, M.P. Van (1990). World Bank and alternative Industrialization Strategies, in Meine Pieter van Dijk & Henrik Secher Marcussen (eds.), *Industrialization in the Third World- The need for alternative Strategies*, Frank Cass, London.

Edim (2000). E-commerce and SMEs. (Online) <http://www.edim.com.my>.

Erwin Dan (2000). Data Security Seen Crucial for E-Commerce Success.

Evans, P.B. and Wurster, T.S. (1997). Strategy and The New Economics of Information, *Harvard Business Review*, 75 (5), 70-83.

Farhoomand, A. and Lovelock, P. (2001). *Global E-commerce:Text & Cases*, Prentice Hall, 336-352.

Fatimah Mohd Arshad (1999). Prioritising research in marketing in a computer mediated environment in Malaysia, (online), <http://www.econ.upm.edu.my>.

Hagel, J. and Lansing, W.J. (1994). Who Owns the Customer, *The Mc Kinsey Quarterly*, 4, 63-75.

- Hashim, M.K. dan Abdullah, M.S. (2000). A Proposed Framework for Redefining SMEs in Malaysia: One industry, One definition, *Asian Academy of Management Journal*.
- Heizer, J. and Render, B. (2000). *Operations Management* 6th ed. Prentice Hall, New Jersey, USA.
- Hoffman, D.L. and Novak, T.P. (1996). Marketing in Hypermedia Computer-Mediated Environment Conceptual Foundations, *Journal of Marketing*, 60, 50-60.
- Karkoviata, L. (2001). *SMEs reluctant to go online*, Asian Business, Hong Kong.
- Kiang, M.Y. and Chi, R. T. (2000). E-Commerce and Small Business - Finding the Right Products to Sell on the Internet, (online) www.sbaer.uca.edu/research.
- Kotler, P. (2000). *Marketing Management*, Millennium ed., Prentice-Hall International, Hemel Hempstead.
- Krejcie, R. and Morgan, D. (1970). Determining sample size for research activities, *Educational and Psychological Measurement*, 30, 607-610.
- Laudon, K.C. and Traver, C.G. (2001). *E-Commerce*, international edition, Addison Wesley.
- Lazer, W., La Barbera, P.A., MacLachlan, J. and Smith, A.E. (1989). *Moving marketing plans toward the year 2000*. Working paper, College of Business, Florida Atlantic University.
- MacGregor (2003). Strategic alliances and perceived barriers to EC, (online) www.business.
- Madu, C.N. and Madu, A.A. (2003). E-quality in an Integrated Enterprise, *The TQM Magazine*, (15) 3, 127-136.
- Moha Asri Abdullah (1997). *Industri kecil dan Sederhana di Malaysia: Tinjauan Terhadap Perkembangan Program Bantuan*, Penerbit Fajar Bakti Sdn. Bhd. Shah Alam, Malaysia.
- Mohd Amirul Akhbar Mohd Zulkifli (2001). Small Medium Enterprise: Taking The First Steps Into E-Commerce, Available, <http://rds.yahoo.com>.

- Multimedia development Corporation (2000). *Growth of Internet Subscribers in Malaysia*. MECD, Malaysia.
- Niewman, G. (2001). Training entrepreneurs and small business enterprises in South Africa: a situational analysis, *Education and Training*, 43 (8/9), 445-450.
- Nissen, M.E. (1997). The commerce model for electronic redesign. *The Journal of Internet Purchasing*, February, <http://www.arraydev.com/commerce/JIP/9702-01.htm>.
- Noor Hazarina Hashim and Abu Bakar Hamid (2004). E-Commerce in Malaysia Multimedia Super Corridor; Are we there yet?, *Proceeding of Third International Conference on SMEs in a Global Economy*, UiTM and University Wollongong, Malaysia.
- Norudin Mansor (2004). The Importance of Training and Organizational Culture Towards Performance of Small Medium Enterprise in The Globalized Economy, *Proceeding of Economic Colloquium: The Malaysian Perspective*, UiTM Johor, Malaysia.
- Norudin Mansor (2005). Woman in Business: Determinants for Venturing in Malaysians SMEs. *Proceeding of International Conference on Small and medium Size Enterprises in European Economies and All Over The world*, Clujj-Napoca, Romania.
- Norudin Mansor and Noor Rohaya Abdul Manap (2006). SME Awareness of Islamic Financial Institution E-Banking, *Proceeding of National Conference of Social Science and ICT*, UiTM Kedah, Malaysia.
- O' Brien, J.A. (2005). *Introduction To Information System*, 12th ed., Mc Graw Hill, Irwin.
- Pawar, K.S. and Driva, H. (2000). Electronic Trading in The Supply Chain: A Holistic Implementation Framework, *Logistics Information management*, 13 (1), 21-32.
- Reynolds, J. (2000). E-Commerce: A Critical Review, *International Journal of Retail & Distribution Management*, 28 (10), 417- 444.
- Rodrigue, P.J. (1998-2007). *Logistics and E-Commerce*, Available, <http://people>.

- Schneider, G.P. (2002). *Electronic Commerce*, Third annual Edition, Thomson Course Technology.
- Sekaran, U. (2003). *Research Methods for Business: A skill Building Approach*, 4th edition, John Wiley & Sons (Asia) Pte.Ltd.
- Siti Haryati Sheikh, Norudin Mansor and Norsidah Ahmad (2004). Factors that Motivate women to be Entrepreneur, *Proceeding of Third International Conference on SMEs in a Global Economy*, UiTM and University Wollongong, Malaysia.
- Smith, M.K. (2003). *Issue in Cultural Tourism Studies*, 1st edition, Routledge Tailor & Francis Group.
- Terpstra, V. (1987). The evolution of international marketing, *International marketing Review*, 4, 47-59.
- Vrana, V. (2006). Tourism agents Attitudes on Internet Adoption; An Analysis from Greece, *International Journal of Contemporary Hospitality Management*, 18 (7), 601-608.
- Wan, C. (2002). The Web Sites of International Tourist Hotels and Tour Wholesalers in Taiwan, *Tourism Management*, 23 (2), 155-160.
- Wilson, D. and Drysdale, P. (2001). "Perspective" in Drysdale, P. (ed), *Reform and Recovery in East Asia – The Role of the State and Economic Enterprise*, Routledge, London.
- Zillur Rahman and Bhattachryya, S.K. (2002). E-tailing of Services: An Indian Scenario, *Singapore management Review*, 24 (1), 67-79.